United Nations Convention on the Law of the Sea CLCS/24

Commission on the Limits of the Continental Shelf

Distr.: General
1 September 2000

Original: English

Eighth session
New York, 28 August-1 September 2000

Outline for a five-day training course for delineation of the outer limits of the continental shelf beyond 200 nautical miles and for preparation of a submission of a coastal State to the Commission on the Limits of the Continental Shelf

Adopted by the Commission at its eighth session on 1 September 2000

I. Introduction

1. Coastal States intending to establish the outer limits of their continental shelf beyond 200 nautical miles from the baselines from which the breadth of their territorial sea is measured are required by article 76 of the United Nations Convention on the Law of the Sea to submit the relevant data and information to the Commission. The task of the Commission is to examine this submission and to make recommendations to coastal States on matters related to the establishment of the outer limits of their continental shelf. Only on the basis of those recommendations may a coastal State establish those outer limits. In accordance with article 4 of annex II to the Convention, the particulars of such limits should be submitted to the Commission within 10 years of the entry into force of the Convention for that State.

2. The Commission has organized itself to prepare for the receipt of submissions from coastal States. It adopted the Scientific and Technical Guidelines (CLCS/11 and Corr.1), which are intended to provide assistance to coastal States regarding the technical nature and scope of the data and information which they have to submit to the Commission.

3. The Scientific and Technical Guidelines are of a highly complex nature; they deal with geodetic, geological, geophysical and hydrographic methodologies stipulated in article 76 for the establishment of the outer limit of the continental shelf, using such criteria as determination of the foot of the continental slope, sediment thickness and types of sea floor highs. The Commission also adopted annexes to the Guidelines (CLCS/11/Add.1 and Corr.1) which, inter alia, include flowcharts providing a simplified outline of the procedures described in the relevant parts of the Guidelines themselves.

00-78576 (E) 120101

II. The issue of training as considered by the Commission

4. The Commission considers that training may play an essential role for the implementation of article 76 of the Convention and of the Guidelines, in particular taking into account the needs of developing States.

5. The Commission considers that an efficient measure in this respect is to prepare a short training course on how to delineate the outer limits of the continental shelf beyond 200 nautical miles, and to prepare a submission regarding those limits of the continental shelf, based on article 76 and annex II to the United Nations Convention on the Law of the Sea and the procedures to be followed in accordance with the Scientific and Technical Guidelines. It is expected that this course will ensure a uniform and consistent practice in the preparation of submissions to the Commission.

6. Immediate action seems paramount bearing in mind the deadline established in article 4 of Annex II to the Convention for the submission of data and materials by coastal States to the Commission within 10 years of the entry into force of the Convention for that State. This deadline in the case of some States is 16 November 2004.

7. At its sixth session the Commission on the Limits of the Continental Shelf agreed upon an action plan for training (CLCS/18, para. 14). Among the actions to be taken by the following session was the preparation of a manual in the form of a flowchart to assist coastal States throughout the process of preparation of a submission to the Commission (ibid., para. 15). It was also agreed to undertake a draft outline for a proposed training course of approximately five days' duration aimed at practitioners who would take part in the preparation of the submission of a coastal State (ibid., para. 17).

8. At its seventh session, the Commission produced an outline for a proposed five-day seminar or workshop aimed at assisting experts involved in the preparation of submissions to the Commission.

9. At its eighth session the Commission prepared a detailed outline of a five-day training course which contains references to its Scientific and Technical Guidelines (CLCS/11/Corr.1, Add.1 and Add.1/Corr.1) and other documents of the Commission, as well as the relevant publications of the United Nations,[1] that should be used for teaching purposes in order to enable the preparation of a submission as recommended by the Commission. The intended participants in the course should be from among professionals in geophysics, geology, hydrography and geodesy, as well as other specialists who would be preparing a submission to the Commission. At least a bachelor's degree or equivalent thereof should be a prerequisite to participate in the course.

III. The function of the Commission vis-à-vis training

10. It should be noted that the Commission was elected to perform two specific functions, as set out in article 3 (1) of Annex II to the Convention:

(a) To consider the data and other material submitted by coastal States concerning the outer limits of the continental shelf in areas where those limits extend beyond 200 nautical miles, and to make recommendations in accordance with article 76 and the Statement of Understanding adopted on 29 August 1980 by the Third United Nations Conference on the Law of the Sea;

(b) To provide scientific and technical advice, if requested by the coastal State concerned during the preparation of the data referred to in subparagraph (a).

11. The Commission is not mandated by the Convention to conduct or organize training, though members may be involved in their personal capacities. Nevertheless, the Commission as a body felt obliged to prepare the outline for a five-day training course contained in the annex to the present document in order to facilitate the preparation of submissions in accordance not only with its Guidelines, but also with the letter and spirit of the Convention. The suggested course could be developed and delivered by interested Governments and/or international organizations and institutions which possess the necessary facilities and pedagogic and subject expertise. Preferably, the training course should be material dependent and designed to be delivered at various locations around the world. Such a high-quality training course could then be adapted to the particular needs at the regional level.

12. In this connection the Commission welcomes the recommendation of the Tenth Meeting of States Parties to the United Nations Convention on the Law of the Sea to the General Assembly of the United Nations that the Assembly consider, at its fifty-fifth session, under the agenda item entitled "Oceans and the law of the sea", the establishment of a voluntary fund or funds, for the purposes of: (a) providing assistance to States Parties to meet their obligations under article 76 of the Convention; and (b) providing training to developing countries, in particular the least developed among them and small island developing States, for preparing their submission to the Commission with respect to the limits of their continental shelf beyond 200 nautical miles, as appropriate.[2]

IV. The training course

13. The aim of the course is to provide training necessary to develop the knowledge and skills for the preparation of submissions. Lectures and practice should be combined to make the participants aware of the logic of the procedures and the relevance of all the technical elements involved. The course will provide a State with a selected group of staff that would make up the core of advisers to their Government to plan and conduct the preparation of a submission. In order to assist in the implementation of the training course, the Commission prepared an outline of the course containing references to materials that could be useful in its development.

14. The goals of the training course include the following:

(a) To give the technical staff of a coastal State an in-depth understanding of the full procedure that must be followed in order to determine the outer limits of the State's continental shelf, so that those limits will be accepted as final and binding;

(b) To give the technical staff of a coastal State an outline of the technical and scientific data that will be required to prepare the submission;

(c) To make the technical and other staff of a coastal State aware of how different fields of expertise will have to be merged in order to satisfy the technical and scientific requirements of article 76 of UNCLOS and of the Technical and Scientific Guidelines;

(d) Through practical exercises, to train the technical staff of the coastal State in producing a submission on the outer limits of the continental shelf.

15. The insight gained by the State's technical staff through such a course will enable the government:

(a) To assess the complexity of its own case in the light of its deadline;

(b) To decide on the institutional framework within the State to organize and prepare the necessary submission to the Commission; and

(c) To assess how much of the task may be carried out by its own staff and how much will have to be contracted out.

16. According to the assessment of the Commission, the potential number of participants is estimated to be between 200 and 400 over a period of five years.

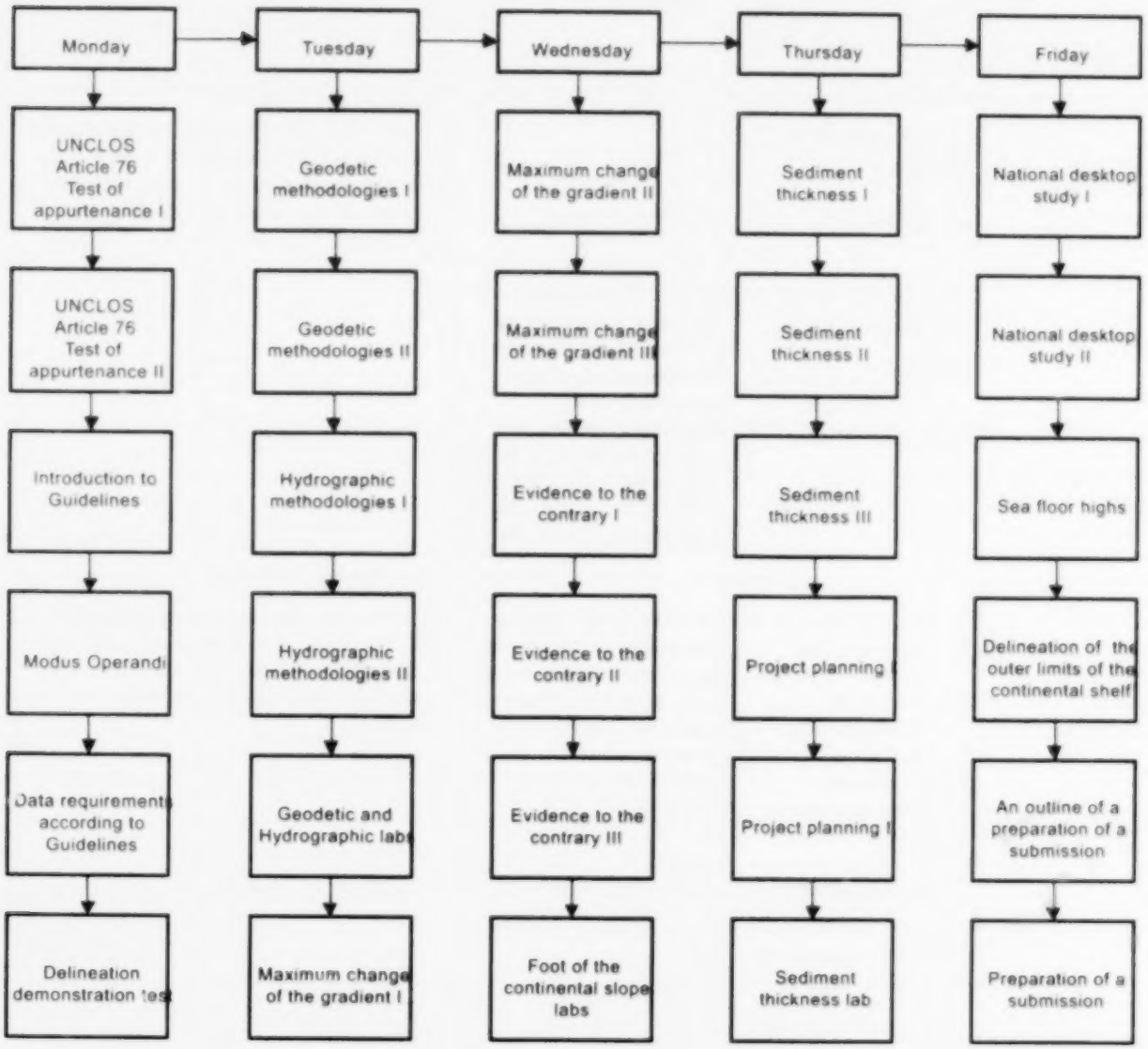
Notes

[1] ***Baselines: An Examination of the Relevant Provisions of the United Nations Convention on the Law of the Sea***, United Nations publication, Sales No. E.89.V.10; ***Definition of the Continental Shelf: An Examination of the Relevant Provisions of the United Nations Convention on the Law of the Sea***, United Nations publication, Sales No. E.93.V.16.

[2] SPLOS/59.

Annex

Modules for a five-day training course



Five-day training course: detailed outline

Module	Topics to be covered	Suggested illustrative material: (a) already available (shown in bold); (b) *to be prepared (shown in italics)*	Suggested teaching and reference material available, including CLCS documents and presentations by members of the CLCS
MONDAY			
1 UNCLOS Article 76 Test of appurtenance I	1.1 Short international law history 1.2 Jurisdictional maritime zones 1.3 Scientific concepts of the continental margin 1.4 Article 76, paras. 1-3 1.4.1 Concept of the juridical continental shelf	1.2: *Map illustration* 1.3-1.4: **"The United Nations Convention on the Law of the Sea and the delineation of the outer limit of the continental shelf"**, presentation by H. Brekke at Open Meeting of CLCS, 1 May 2000 (report of the Open Meeting, CLCS/26)	UNCLOS 1982 1.1-1.4: "The United Nations Convention on the Law of the Sea and the delineation of the outer limit of the continental shelf": presentation by H. Brekke at Open Meeting of CLCS, 1 May 2000 (Report of the Open Meeting, CLCS/26)
2 UNCLOS Article 76 Test of appurtenance II	2.1 Article 76, paras. 4-10 2.1.1 Concept of the continental margin 2.1.2 Foot of the continental slope 2.1.3 Ridges 2.1.4 Constraints 2.1.5 Final limit line 2.2 Test of appurtenance	2.1: **"The United Nations Convention on the Law of the Sea and the delineation of the outer limit of the continental shelf"**, presentation by H. Brekke at Open Meeting of CLCS (CLCS/26) 2.1-2.2: **CLCS/11/Add.1, annex II** 2.2: *Map illustrations*	UNCLOS 1982 2.1: "The United Nations Convention on the Law of the Sea and the delineation of the outer limit of the continental shelf": presentation by H. Brekke at Open Meeting of CLCS (CLCS/26) 2.2: CLCS/11 — chap. 2

Module	Topics to be covered	Suggested illustrative material: (a) already available (shown in bold); (b) *to be prepared (shown in italics)*	Suggested teaching and reference material available, including CLCS documents and presentations by members of the CLCS
3 Introduction to Guidelines	3.1 Introduction, background 3.2 Chap. 2-3 3.3 Chap. 4-6 3.4 Chap. 7-9	3.1-3.4: **"Scientific and Technical Guidelines of the CLCS"**, presentations by O.P. Astiz, K-S.R. Srinivasan, M. Juracic and G. Carrera at Open Meeting of CLCS (CLCS/26)	CLCS/11 "Scientific and Technical Guidelines of the CLCS": presentations by O.P. Astiz, K-S.R. Srinivasan, M. Juracic and G. Carrera at Open Meeting of CLCS; (CLCS/26) Definition of the Continental Shelf: An Examination of the Relevant Provisions of UNCLOS (1993) (Sales No. E.93.V.16) (DOALOS publication) Commission on the Limits of the Continental Shelf: its functions and scientific and technical needs in assessing the submission of a coastal State (1996) (SPLOS/CLCS/INF.1) (DOALOS publication)
4 Modus Operandi	4.1 Background 4.2 Flow of process 4.2.1 Subcommission and its work 4.2.2 Recommendations by the Subcommission 4.2.3 Preparation and content of the recommendations by the Commission 4.2.4 Actions by the coastal State following the recommendations of the Commission	4.1-4.2: **"Modus Operandi of the CLCS"(CLCS/L.3),** presentation by S. Betah and A. Chan Chim Yuk at Open Meeting of CLCS	4.1-4.2: "Modus Operandi of the CLCS"(CLCS/L.3), presentation by S. Betah and A. Chan Chim Yuk at Open Meeting of CLCS (CLCS/26)
5 Data requirements according to Guidelines	5.1 Background 5.2 Data requirements	 5.2: *Data and format examples*	5.1: UNCLOS, Annex II; CLCS/11 5.2: CLCS/11, chap. 9

Module	Topics to be covered	Suggested illustrative material: (a) already available (shown in bold); (b) *to be prepared (shown in italics)*	Suggested teaching and reference material available, including CLCS documents and presentations by members of the CLCS
6 Delineation demonstration test	6.1 Article 76, paras. 4-7 6.2 Summary of delineation principles 6.3 Exercise	6.3: *Map to scale with:* - *Bathymetry* - *Foot of continental slope points* - *Sediment thickness contours* - *Baseline and 200 M line* *Foot of continental slope profile* *Sediment thickness profiles*	6.1-6.3: CLCS/11

TUESDAY

7 Geodetic methodologies I	7.1 Units, reference systems and coordinate transformations 7.2 Sources of data 7.3 Positioning methodologies 7.4 Error estimation	7.1: **CLCS/11, fig. 3.1**	7.1-7.4: CLCS/11
8 Geodetic methodologies II	8.1 Geodetic definition of baselines 8.2 Envelope of arcs and tracés paralleles techniques 8.3 Confidence zones	8.1-8.3: **CLCS/11, figs. 2.2, 2.3, 2.4, 2.6**; **"Scientific and Technical Guidelines of the CLCS"**, presentation by O.P. Astiz, K-S.R. Srinivasan, M. Juracic and G. Carrera at Open Meeting of CLCS (CLCS/26)	CLCS/11 CLCS/11/Add. 1 Baselines: An Examination of the Relevant Provisions of UNCLOS (1989) (Sales No. E.88.V.5) (DOALOS Publication)

Module	Topics to be covered	Suggested illustrative material: (a) already available (shown in bold); (b) *to be prepared (shown in italics)*	Suggested teaching and reference material available, including CLCS documents and presentations by members of the CLCS
9 Hydrographic methodologies I	9.1 Sources of data 9.2 Hydrographic methodologies: single-, multi-beam echo sounding, interferometric sonar measurements, seismic-derived bathymetry	9.1: **CLCS/11, fig. 4.2.7**	9.1-9.2: CLCS/11 International Hydrographic Organization (IHO)-IHO Standards for Hydrographic Surveys, 4th ed. Special Publication 44 (1998), Monaco United Kingdom Hydrographic Office, General Instructions for Hydrographic Surveyors
10 Hydrographic methodologies II	10.1 Low-water line 10.2 Chart compilation and nautical cartography 10.3 Contouring techniques and the 2,500 m isobath 10.4 Fractal properties of isobaths and coastlines	*10.1: Chart illustrating low-water line* *10.2: Navigational chart* *10.3: Bathymetric profiles*	Baselines: An Examination of the Relevant Provisions of UNCLOS M-4: Chart Specifications of the International Hydrographic Organization and Regulations for International INT Charts (Monaco) CLCS/11, chap. 4
11 Geodetic and hydrographic labs	11.1 Determination of outer limits 11.2 Error assessment 11.3 Contouring and confidence regions	11.1-11.3: **CLCS/11, figs. 2.1-2.8** *2D and 3D digital terrain models*	11.1-11.3: CLCS/11, chaps. 3 and 4 Definition of the Continental Shelf (1993)
12 Maximum change of the gradient I	12.1 Sources of data 12.2 Digital bathymetric modules 12.3 Error estimates	12.1-12.3: **CLCS/11, figs. 2.1, 2.2, 2.5**	12.1-12.3: CLCS/11 IHO, Special Publication 44

Module	Topics to be covered	Suggested illustrative material: (a) already available (shown in bold); (b) *to be prepared (shown in italics)*	Suggested teaching and reference material available, including CLCS documents and presentations by members of the CLCS

WEDNESDAY

13 Maximum change of the gradient II	13.1 Filtering 13.2 Smoothing	13.1-13.2: **"Impact of seabed roughness on the location of the outer limits of the extended continental shelf"**, presentation by G. Carrera at ABLOS Conference, 1999, Monaco[a]	13.1-13.2: CLCS/11 "Impact of seabed roughness", presentation by G. Carrera at ABLOS Conference, 1999, Monaco[a]
14 Maximum change of the gradient III	14.1 Derivatives 14.2 2-D and 3-D estimation of the foot of the continental slope 14.3 Error estimation	14.1-14.3: **"Impact of seabed roughness on the location of the outer limits of the extended continental shelf"**, presentation by G. Carrera at ABLOS Conference, 1999, Monaco[a]	14.1-14.3: "Impact of seabed roughness": presentation by G. Carrera at ABLOS Conference, 1999, Monaco[a]
15 Evidence to the contrary I	15.1 Article 76, para. 4 (b) 15.2 Types of continental margins: - Accretionary convergent margin - Poor or non-accretionary convergent margin - Destructive convergent margin	15.2: **CLCS/11, fig. 6.1**	15.1-15.2: CLCS/11, chap. 6
16 Evidence to the contrary II	16.1 Types of continental margins (continued): - Rifted non-volcanic margin - Rifted volcanic margin - Sheared margin 16.2 Geological and geophysical evidence relevant for the problem	16.1: **CLCS/11, fig. 6.1**	16.1-16.2: CLCS/11, chap. 6

Module	Topics to be covered	Suggested illustrative material: (a) already available (shown in bold); (b) *to be prepared (shown in italics)*	Suggested teaching and reference material available, including CLCS documents and presentations by members of the CLCS
17 Evidence to the contrary III	17.1 Determination of the foot of the continental slope at: - Convergent margins - Rifted and sheared margins - Rifted volcanic margins 17.2 Consideration and discussion of evidence	17.1: **CLCS/11, fig. 6.1**	17.1-17.2: CLCS/11, chap. 6
18 Foot of the continental slope labs	18.1 Summary of principles 18.2 Exercise in determining the foot of the continental slope: - By maximum change in gradient - By evidence to the contrary	18.2: *2D and 3D bathymetric, seismic, gravimetric, magnetic models (maps and profiles)*	18.1-18.2: CLCS/11, chaps. 5 and 6

THURSDAY

19 Sediment thickness I	19.1 Formulation of the problem: - Brief introduction to the sedimentology of margins - Definition of thickness, basic requirements 19.2 Relevant geophysical techniques and data: - Seismic reflection - Seismic refraction - Grav/mag - Interpretation and mapping - Minimum data coverage	19.1: **CLCS/11, fig. 8.1** *Maps and profiles based on literature* 19.2: *Example profiles, example maps*	19.1-19.2: CLCS/11, chap. 8

Module	Topics to be covered	Suggested illustrative material: (a) already available (shown in bold); (b) *to be prepared (shown in italics)*	Suggested teaching and reference material available, including CLCS documents and presentations by members of the CLCS
20 Sediment thickness II	20.1 Depth conversion and thickness determination: - Seismic velocity, theory and applications - Depth conversion of seismic data - Inversion of grav/mag data 20.2 Selection of outermost fixed points: principles for selection of points	20.1: *Principle figures based on literature on theory* 20.2: *Set of profile examples of different, realistic situations for selection of outermost points*	20.1-20.2: CLCS/11, chap. 8
21 Sediment thickness III	21.1 Error estimates: - Analysis of sediment distribution vs relief of surfaces - Analysis of data accuracy - Computation of range of error - Transformation to map view	21.1: **CLCS/11, fig. 8.3** **"Uncertainties and errors in sediment thickness"**, presentation by H. Brekke at ABLOS Conference, 1999, Monaco[a] *Set of example profiles of realistic situations for implementing methods*	20.1: CLCS/11, chap. 8 "Uncertainties and errors in sediment thickness", presentation by H. Brekke at ABLOS Conference, 1999, Monaco[a]
22 Project planning I	22.1 Existing available data 22.2 Analysis of the need for new data, data types 22.3 Survey planning	22.1-22.2: *National desktop study* (see modules 25 and 26) 22.3: *Survey planning charts*	22.1-22.2: National desktop study (see modules 25 and 26)

Module	Topics to be covered	Suggested illustrative material: (a) already available (shown in bold); (b) *to be prepared (shown in italics)*	Suggested teaching and reference material available, including CLCS documents and presentations by members of the CLCS
23 Project planning II	23.1 Analysis of service demands, acquisition and processing 23.2 Analysis of in-house equipment and training 23.3 Tendering process 23.4 Management and monitoring	23.1-23.2: *Technical working group listing* 23.3: *Survey specifications* 23.4: *Survey planning chart and work programme*	23.1-23.2: National desktop study (see modules 25 and 26)
24 Sediment thickness lab	24.1 Sediment thickness 24.1.1 Seismic interpretation, definition of basement 24.1.2 Depth conversion on profile 24.1.3 Analysis of uncertainties/ inaccuracies 24.2 Gardiner line-error calculation 24.2.1 Method 24.2.2 Analysis of profiles and calculations 24.2.3 Final line with error bar	24.1.1: *Example seismic lines* 24.1.2: *Velocity analysis data* 24.2: *Example sediment thickness map, bathymetry map, interpreted profiles for analysis*	24.1-24.2: CLCS/11 24.2: "Uncertainties and errors in sediment thickness", presentation by H. Brekke at ABLOS Conference, 1999, Monaco[a]

Module	Topics to be covered	Suggested illustrative material: (a) already available (shown in bold); (b) *to be prepared (shown in italics)*	Suggested teaching and reference material available, including CLCS documents and presentations by members of the CLCS
FRIDAY			
25 National desktop study I	25.1 Existing available data research 25.2 Existing data coverage maps 25.3 Bathymetry, status map 25.4 Foot of the continental slope, preliminary map 25.5 2,500 m contour, preliminary 25.6 Sediment thickness, preliminary map	25.1-25.6: **"An outline for the preparation of a submission to the CLCS"**, presentation by G. Carrera and A. Albuquerque at Open Meeting of CLCS (CLCS/26) 25.2-25.3: **GEBCO maps** 25.4: *Foot of the continental slope profiles* 25.5: *Ocean sounding sheets and navigational charts*	25.1-25.6: CLCS/11 "An outline for the preparation of a submission to the CLCS", presentation by G. Carrera and A. Albuquerque at Open Meeting of CLCS (CLCS/26) "Formulating the New Zealand continental shelf claim: a first step", presentation by Iain Lamont at ABLOS Conference, 1999, Monaco[a]
26 National desktop study II	26.1 Analysis of the need for new data, data types 26.2 Cost estimates 26.3 Recommendations	26.1-26.3: **"An outline for the preparation of a submission to the CLCS"**, presentation by G. Carrera and A. Albuquerque at Open Meeting of CLCS (CLCS/26)	26.1: "An outline for the preparation of a submission to the CLCS", presentation by G. Carrera and A. Albuquerque at Open Meeting of CLCS (CLCS/26) "Formulating the New Zealand continental shelf claim: a first step", presentation by I. Lamont at ABLOS Conference, 1999, Monaco[a] 26.2-26.3: "New Zealand continental shelf project", presentation by G. Shepard at 2000 New Zealand Petroleum Conference

Module	Topics to be covered	Suggested illustrative material: (a) already available (shown in bold); (b) *to be prepared (shown in italics)*	Suggested teaching and reference material available, including CLCS documents and presentations by members of the CLCS
27 Sea floor highs	27.1 Article 76, paras. 3 and 6 27.2 Types of sea floor highs, review 27.3 Oceanic ridges and submarine ridges 27.4 Submarine elevations	27.1: **"The United Nations Convention on the Law of the Sea and the delineation of the outer limit of the continental shelf"**, presentation by H. Brekke at Open Meeting of CLCS (CLCS/26) 27.2: *Illustration maps and profiles*	27.1-27.4: UNCLOS 1982 CLCS/11 "Definition of the Continental Shelf"(1993) "The United Nations Convention on the Law of the Sea and the delineation of the outer limit of the continental shelf", presentation by H. Brekke at Open Meeting of the CLCS (CLCS/26) "A review of continental margins of the world", presentation by K. Hinz at ABLOS Conference, 1999, Monaco[a]
28 Delineation of the outer limits of the continental shelf	28.1 Article 76, paras. 4, 5 and 7 28.2 Formulae line 28.3 Constraints line 28.4 60 M lines 28.5 Outer limit of the continental shelf	28.1-28.5: **CLCS/11, figs. 2.5-2.8**	28.1: UNCLOS 1982 28.2-28.5: CLCS/11

Module	Topics to be covered	Suggested illustrative material: (a) already available (shown in bold); (b) *to be prepared (shown in italics)*	Suggested teaching and reference material available, including CLCS documents and presentations by members of the CLCS
29 An outline of a preparation of a submission	29.1 Initial questions and response 29.2 National desktop study as a strategic plan of action 29.3 Scientific and technical data compilation 29.4 Role of the CLCS 29.5 Cost/benefit analysis	29: **CLCS/22** **"Scientific and Technical Guidelines of the CLCS"**, presentation by Astiz, Srinivasan, Juracic and Carrera at Open Meeting of the CLCS (CLCS/26) **"An outline for the preparation of a submission to the CLCS"**, presentation by G. Carrera and A. Albuquerque at Open Meeting of the CLCS (CLCS/26)	CLCS/11 CLCS/11/Add. 1 CLCS/L.3 CLCS/22 "Scientific and Technical Guidelines of the CLCS", presentation by O.P. Astiz, K-S.R. Srinivasan, M. Juracic and G. Carrera at Open Meeting of the CLCS (CLCS/26) "An outline for the preparation of a submission to the CLCS", presentation by G. Carrera and A. Albuquerque at Open Meeting of the CLCS (CLCS/26)
30 Preparation of a submission	30.1 From a national desktop study to a submission to the CLCS 30.2 Executive summary 30.3 Main body 30.4 Supporting data	30: **CLCS/22** **"An outline for the preparation of a submission to the CLCS"**, presentation by G. Carrera and A. Albuquerque at Open Meeting of the CLCS (CLCS/26)	CLCS/11 CLCS/22 "An outline for the preparation of a submission to the CLCS", presentation by G. Carrera and A. Albuquerque at Open Meeting of the CLCS (CLCS/26)

[a] International Conference on Technical Aspects of Maritime Boundary Delineation and Delimitation, including UNCLOS Article 76 Issues, organized by the International Hydrographic Bureau (IHB), the International Association of Geodesy (IAG), and the Advisory Board on Hydrographic, Geodetic and Marine Geo-Scientific Aspects of the Law of the Sea, held at the International Hydrographic Bureau, Monaco, 8-9 September 1999.

Appendix

Specialized training modules on the provisions of the Statement of Understanding of the Final Act of UNCLOS 1982 – optional for interested States

A1[a] UNCLOS Annex II to Final Act Test of Appurtenance	A1.1 Annex II to the Final Act A1.2 Applicability of Annex II A1.3 Outer limit of the continental margin A1.4 Constraints A1.5 Final limit line A1.6 Test of appurtenance	A1.1: *Illustration profile* A1.2: **"Definition of the continental shelf" (1993), fig. 9**	A.1-6: UNCLOS 1982 Definition of the Continental Shelf (1993)
A2[b] Delineation demonstration test	A2.1 Article 76, paras. 4-7 A2.2 Annex II to the Final Act A2.3 Summary of delineation principles A2.4 Exercise	A2.4 *Map to scale with:* - *Bathymetry* - *Foot of continental slope points* - *Sediment thickness contours* - *Baseline and 200 M line* *Foot of the continental slope profiles* *Sediment thickness profiles*	UNCLOS 1982 CLCS/11 CLCS/11/Add.1

[a] To supplement or replace module 2.
[b] To supplement or replace module 6.

References

Astiz, O., Carrera, G., Juracic, M. and Srinivasan, K. R. 2000. "Scientific and Technical Guidelines of the Commission on the Limits of the Continental Shelf", Open Meeting of the Commission on the Limits of the Continental Shelf, held on 1 May 2000, report of the Open Meeting, CLCS/26.

Betah, S. and Chan Chim Yuk, A. 2000. "Modus Operandi of the CLCS", Open Meeting of the Commission on the Limits of the Continental Shelf, held on 1 May 2000, report of the Open Meeting, CLCS/26.

Brekke, H. 1999: "Uncertainties and errors in sediment thickness", Proceedings of the International Conference on Technical Aspects of Maritime Boundary Delineation and Delimitation, including UNCLOS Article 76 Issues, International Hydrographic Bureau, Monaco, pp. 42-59.

Brekke, H. 2000: "The United Nations Convention on the Law of the Sea and the delineation of the outer limit of the continental shelf", Open Meeting of the Commission on the Limits of the Continental Shelf, held on 1 May 2000, report of the Open Meeting, CLCS/26.

Carrera, G. 1999: "The impact of seabed roughness on the location of the outer limits of the extended continental shelf", Proceedings of the International Conference on Technical Aspects of Maritime Boundary Delineation and Delimitation, including UNCLOS Article 76 Issues, International Hydrographic Bureau, Monaco, pp. 78-102.

Carrera, G. and Albuquerque, A. 2000. "An outline for the preparation of a submission to the Commission on the Limits of the Continental Shelf", Open Meeting of the Commission on the Limits of the Continental Shelf, held on 1 May 2000, report of the Open Meeting, CLCS/26.

CLCS/L.3. "Modus Operandi of the Commission", CLCS/L.3, 12 September 1997.

CLCS/11. "Scientific and Technical Guidelines of the Commission on the Limits of the Continental Shelf", CLCS/11, 13 May 1999.

CLCS/11/Add.1 and Corr.1. "Scientific and Technical Guidelines of the Commission on the Limits of the Continental Shelf, annexes II-IV to the Guidelines adopted by the Commission on 3 September 1999 at its sixth session", CLCS/11/Add.1, 3 September 1999.

CLCS/22. "Basic Flowchart for Preparation of a Submission of a Coastal State to the Commission on the Limits of the Continental Shelf", CLCS/22, 5 May 2000.

Hinz, K. 1999. "A review of continental margins of the world", Proceedings of the International Conference on Technical Aspects of Maritime Boundary Delineation and Delimitation, including UNCLOS Article 76 Issues, International Hydrographic Bureau, Monaco, pp. 20-33.

International Hydrographic Organization 1993. "Specifications for Chart content and display aspects of ECDIS", 3rd ed., Special Publication No. 52, Monaco.

International Hydrographic Organization 1998. "IHO Standards for Hydrographic Surveys", 4th ed., Special Publication No. 44, Monaco.

Lamont, I. 1999. "Formulating the New Zealand continental shelf claim: a first step", Proceedings of the International Conference on Technical Aspects of Maritime Boundary Delineation and Delimitation including UNCLOS Article 76 Issues, International Hydrographic Bureau, Monaco, pp. 34-41.

Shepard, G. 2000: "New Zealand continental shelf project", 2000 New Zealand Petroleum Conference Proceedings.

United Nations 1989. *Baselines: National Legislation with Illustrative Maps*, United Nations publication, Sales No. E.89.V.10. Prepared by the Office for Ocean Affairs and the Law of the Sea.

United Nations 1993. *Definition of the Continental Shelf*, United Nations publication, Sales No. E.93.V.19. Prepared by the Office for Ocean Affairs and the Law of the Sea.

United Nations 1997. "Commission on the Limits of the Continental Shelf: its functions and scientific and technical needs in assessing the submission of a coastal State", SPLOS/CLCS/INF/1, 10 June 1996.